

TECHNICIAN'S CHECKLIST

SECTION 1400

ROADWAY LIGHTING

PROJECT: _____

TECHNICIAN: _____

REVIEW DATE: _____

REVIEWER: _____

ACTION	YES	NO	N/A	COMMENTS
Prior to Work Starting				
Review plans and set up Pay Record book. Verify plan accuracy through field inspections. Check for encroachment on transmission right-of-way. a) Underground utilities. b) Conflicts with storm drainage and other construction conflicts. c) Check for level of utility investigation previously made (on utility plans). d) Review traffic control plan and cross-sections to eliminate conflicts with other construction activities; grading, paving, installation of guardrail, etc.				
Make sure that utility companies have been notified of service to be provided (locate service poles).				
Contact Division lighting personnel (in maintenance) to review plans for comments, i.e., location of service poles, location of control boxes, orientation access port for median light service.				
Collect names and telephone numbers for : a) Electrical Inspector having jurisdiction. b) Utility company representative. c) Utility company which may have conflicts. d) N.C. ONE CALL or other locating company.				
Preconstruction Conference: a) Have utility representative. b) Have Division Traffic Services represented. c) Review electrical plans and special provisions. d) Determine qualifications of Electrical Contractor. e) Set ground rules as to competent supervisions being on the construction site per Section 1400-1.				
Pre-Lighting-Work Meeting (Article 1400-11).				
Submittals and Certifications (1400-2), (1400-3)				
Review plans for roadway lighting to have an understanding of the submittals required				
Materials to be new unless otherwise noted. (1400-2)				
Use only approved material (written approval by Engineer(1400-3)).				
Submittal of eight copies of Catalog Cuts for approval.(1400-3)				
Forty-day review time but it may take longer so send submittals early.(1400-3)				
Submittal of all components.(1400-3)				
Separate submittal for each contract bid item (may contain many components and some components may be in other submittals).(1400-3)				

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<p>Certifications - See Special Provisions for changes as materials are received.(1400-3B)</p> <p>a) Complete Materials Received Report for each component received and list which pay item it is in.</p> <p>b) Take samples as required by the Engineer. Contractor may be compensated for these samples.(1400-3C)</p> <p>c) Get certifications at time of delivery and note on the materials received report that the material can be used prior to getting certification since the material has an approved Catalog Cut. See Project Special Provisions for changes.(1400-3(B).</p> <p>d) Warranties- Get copies of warranties for each component, compile and turn over to Division Traffic Services at final inspection.(1400-3E)</p>				
When Work has Started				
As-built Plans - The Contractor shall submit 2 complete sets of as-built plans. The Contractor shall keep the as-built plans updated daily. Each control panel shall have the portion of an as-built plan placed in it which pertains to that circuit (this is not part of the two complete sets of as-built plans).				
The Engineer, unless the contract provides for contract engineering, shall locate all lights and electrical duct.				
The Contractor shall mark all locations of other components for approval.				
Light standards can be moved no more than 10 feet longitudinally and 2 feet laterally unless approved by the Roadway Design Unit.				
High Mast standard foundations can be moved no more than 25 feet in radius unless approved by the Roadway Design Unit. Maintain a minimum offset of 50 feet from edge of travel unless the foundation is located behind guardrail.				
Light standard foundations shall clear any underground conflict, which might affect the foundation stability, by 10 feet horizontal distance. Anchor bolts shall have full projection, as shown on approved submittals.				
All underground conflicts shall have been reviewed prior to starting operations. It is the responsibility of the Contractor to have conflicts located.				
The Contractor shall operate all equipment in a safe manner and as allowed by the traffic control plans.				
Only electrical 90 degree sweeps are allowed with no more than three 90 degree sweeps between outlets.				
Bury all conduit to proper depths.				
Provide pull lines.				
All conduit shall be clean upon completion of a system to a diameter of at least 85% of the conduit.				
All stub-outs shall be capped with devices of the same type material.				

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Any damaged or uncoated galvanized metal shall be covered with two coats of zinc rich paint (not spray paint) meeting the requirements of the specifications. (1076-7)				
The Contractor shall submit a splice sample for review and approval.				
All conductors shall be color coded as noted.				
Inspections by Others				
Contractor is responsible for having each electrical system inspected.				
Written verification shall be provided to the Engineer (certificate of inspection).				
All work shall have been inspected and approved by the Engineer prior to any concealment.				
All checks shall be noted in the diary and Pay Record Book.				
The Engineer should contact the Lighting and Electrical Squad of the Roadway Design Unit to schedule a final inspection of lighting systems at least 2 weeks prior to needing the inspection.				
Performance Test				
2 consecutive week burn-in test in automatic mode.				
Acceptance will be made by the Engineer.				
MEG test by Roadway Design Unit.				